

Table of Contents (continued)**Cardiopulmonary
Support and Physiology
(CSP)****1061 Postoperative hypoxia is a contributory factor to cognitive impairment after cardiac surgery ♦***S. M. Browne, MD, FAFRM, P. W. Halligan, PhD, DSc, D. T. Wade, MD, and D. P. Taggart, MD, PhD, FRCS, Oxford, United Kingdom*

Cognitive dysfunction and postoperative hypoxia are common sequelae of CABG, but there has been no study to determine whether there is any relationship between them. We report a significant correlation between postoperative cognitive dysfunction and hypoxia (as measured by absolute Pao_2 and percentage of saturation) in 115 patients 5 days after CABG. This finding might have implications for therapeutic intervention because early postoperative cognitive dysfunction is a key determinant of long-term impairment.

1065 L-Arginine polymers enhance coronary flow and reduce oxidative stress following cardiac transplantation in rats*Murray H. Kown, MD, Maarten A. Lijkwan, BS, Christina L. Jahncke, BS, Seiichiro Murata, MD, PhD, Jonathan B. Rothbard, PhD, and Robert C. Robbins, MD, Stanford and Sunnyvale, Calif*

Hearts incubated with L-arginine polymers have demonstrated upregulated nitric oxide production. This may be the mechanism by which L-arginine polymer-treated hearts had perioperative preservation of coronary flow and reduced oxidative stress in this study. L-Arginine polymers may thus be a useful myocardial protective agent against ischemia-reperfusion injury.

1071 Association of lipoprotein(a) excess with early vein graft occlusions in middle-aged men undergoing coronary artery bypass surgery*Sergei N. Pokrovsky, PhD, Marat V. Ezhov, MD, Larisa N. Il'ina, MD, Olga I. Afanasieva, PhD, Valentin Y. Sinityn, MD, Andrey A. Shiriaev, MD, and Renat S. Akchurin, MD, Moscow, Russia*

We evaluated 102 male patients with chest pain occurring within the first year after CABG. Electron-beam computed tomography revealed vein graft occlusions in 65%. Lower lipoprotein(a) level and use of statins were independent predictors associated with a lower rate of vein graft occlusion.

1076 Immediate flow reserve of Y thoracic artery grafts: An intraoperative flowmetric study*Mario Gaudino, MD, Michele Di Mauro, MD, Angela Lorena Iacò, MD, Carlo Canosa, MD, Giuseppe Vitolla, MD, and Antonio Maria Calafiore, MD, Chieti, Italy*

Intraoperative flow reserve of the Y thoracic artery graft was evaluated in 21 patients, at rest and after dobutamine injection, by a transit time Doppler flowmeter. Dobutamine increases the flow in the Y thoracic artery graft by more than two times in the main stem and in each branch, attesting to the hemodynamic potential of Y thoracic conduits.

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